



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,633	05/08/2001	Mark Hauck	10971990-2	4289

7590 06/10/2003

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P. O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

NGHIEM, MICHAEL P

ART UNIT PAPER NUMBER

2863

DATE MAILED: 06/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>1. Office Action Summary</b>	Application No.	Applicant(s)
	09/851,633	HAUCK, MARK
	Examiner	Art Unit
	Michael P Nghiem	2863

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 16 December 2002 and 09 April 2003.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 35,36,38-41 and 44 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 35,36,38-41 and 44 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)      4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)      5) Notice of Informal Patent Application (PTO-152)  
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.      6) Other:

**DETAILED ACTION**

The Communications filed on December 16, 2002 and April 9, 2003 have been acknowledged.

***Terminal Disclaimer***

1. The terminal disclaimer filed on December 16, 2002 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent 6,250,747 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of the Treaty in the English language.

Art Unit: 2863

Claims 38, 40, and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Childers et al. (US 5,992,990).

Childers et al. discloses all the claimed features of the invention including:

- a method (Figs. 1, 8, 9) for regulating pressure in a print cartridge (38) having a fluid source (30) and a local reservoir (18), the method comprising the steps of:

- sensing the pressure (column 4, lines 30-31);

- issuing a first flow of fluid into the local reservoir (by opening valve 126) from the fluid source (Fig. 1) when the pressure is less than a first predetermined limit (column 4, lines 31-32);

- issuing a second flow of fluid (valve 126 remains open, column 4, lines 32-34) into the local reservoir from the fluid source (Fig. 1) when the pressure is less than a second predetermined limit (column 4, lines 33-34);

- said first flow of fluid has a volume flow rate, and

said second flow of fluid has a volume flow rate equal to said volume flow rate of said first flow of fluid (at proximate pressures, yet less than the predetermined limits, flow volumes are same due to constant diameter of tubing 36 and 40, Fig. 9);

- said first flow of fluid has a volume flow rate, and said second flow of fluid has a

Art Unit: 2863

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 35, 36, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Childers et al..

---

Childers et al. further discloses the following claimed features of the invention:

- activating a first flow valve (first 126) when the pressure is less than a first predetermined limit (column 4, lines 31-32);
- deactivating the first flow valve when the pressure is not less than the first predetermined limit (column 4, lines 33-34);
- activating a second flow valve (second 126, column 4, lines 31-32);
- deactivating the second flow valve (column 4, lines 33-34);

activating a vacuum valve (third negative pressure regulator valve 126, column 4, lines

However, even though Childers et al. does not disclose activating/deactivating the second flow/vacuum valve(s) when the pressure is less/not less than the second/third predetermined limit(s), Childers et al. discloses that the limits can be more negative than already disclosed (column 4, lines 34-38) depending on the size of the tube nozzles.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to activate/deactivate the second and vacuum valves of Childers et al. with respect to different predetermined limits for the purpose of accommodating the different nozzle sizes.

---

Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Childers et al. in view of Pawlowski (US 5,847,734).

Childers et al. discloses all the claimed limitations as discussed above except the step of evacuating air from the local reservoir when the pressure is more than a third predetermined limit.

Nevertheless, Pawlowski discloses a step of evacuating air from the local reservoir when the pressure is more than a third predetermined limit (column 9, lines 7-10) for the purpose of maintaining operating back pressure.

***Response to Arguments***

4. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

***Contact Information***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (703) 308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
MICHAEL NGHIEM  
PRIMARY EXAMINE

Michael Nghiem